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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: George H. HOFFMAN  
Title: SYSTEM, METHOD AND  
COMPUTER PROGRAM  
PRODUCT FOR STRATEGIC  
SUPPLY CHAIN DATA  
COLLECTION  
Appl. No.: 09/815,792  
Filing Date: 03/23/2001  
Examiner: Florian M. Zeender  
Art Unit: 3627

**BRIEF ON APPEAL**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Under the provisions of 37 C.F.R. § 1.192, this Appeal Brief is being filed in triplicate together with a check in the amount of \$330.00 covering the Rule 17(c) appeal fee. If this fee is deemed to be insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 19-0741.

**REAL PARTY IN INTEREST**

The real party in interest are the assignee of record, Restaurant Services, Inc.

**RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal, that are known to appellant, the assignees, or appellant's patent representative.

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### **STATUS OF CLAIMS**

The present appeal is directed to claims 1-27, i.e., all of the presently pending claims in this application.

### **STATUS OF AMENDMENTS**

One amendment was filed to remove potential section 101 issues that have been raised in other co-pending applications. This amendment was entered by the examiner in his Advisory Action dated August 27, 2004

### **SUMMARY OF INVENTION**

The present invention is a method, system and program product for obtaining information relating to the variable of historical performance of promotion products and the unusual variable of on-going competitor activity and how it impacts on-going sales of a plurality of stores, and what that means to suppliers in a supply chain. In the claimed invention as defined in claims 1-24, on-going data relating to the amount of goods sold at a plurality of the stores is used in combination with this information about competitor activity, such as a competitor promotion being run during part or all of the period of this store sales data, to generate an updated forecast of sales for a plurality of the stores in the supply chain. The element is then provided of making this forecast available to a supplier in the supply chain.

Note that competitor activity may reduce product sales, or depending on various factors like advertising, type of product being promoted by the competitor and competitor proximity, may drive sales to the stores. Because competitor activity will not be known in advance, information relating to such on-going competitor promotions and other activity is factored into the forecast after the promotion has started.

Referring to the application specification, pages 38-48 relate to the claims. The specific steps are shown in Fig. 15. Block 1532 represents the computer receiving data from a plurality of stores. Block 1534 represents collecting information relating to a plurality of variables including at least historical performance of promotion products and current competitor activity. See pages 39, lines 26-31. Block 1536 represents a computer processing the data based on the information relating to the variables. Block 1538 represents generating

a forecast of sales based on the information relating to the variables. Access is then provided to a supplier to the forecast of sales. See page 40, lines 25-28, and pages 42, lines 23-29.

With respect to the claims 25-27, the cannibalization limitations are discussed at pages 41, lines 14-22.

### **ISSUES**

The issue on appeal is whether the Examiner erred in rejecting claims 1-27 under 35 USC 103 (a) as being unpatentable over U.S. Patent No. 6,341,271 (Salvo et al.) in view of U.S. Patent No. 4,799,156 (Shavit et al.).

### **GROUPING OF CLAIMS**

Group 1:	Claims 1-3, 5, 6,
Group 2:	Claim 4
Group 3:	Claims 7-9, 11, 12
Group 4:	Claim 10
Group 5:	Claim 13-15, 17, 18
Group 6:	Claim 16
Group 7:	Claim 19
Group 8:	Claim 20
Group 9:	Claim 21
Group 10:	Claim 22
Group 11:	Claim 23
Group 12:	Claim 24
Group 13:	Claim 25
Group 14:	Claim 26
Group 15:	Claim 27

**ARGUMENT**

Group 1: Claim 1 focuses on a combination of elements of receiving store sales data from a plurality of stores of a supply chain, and then processing that data based on information relating to the variables of historical performance of promotion products and the unusual variable of on-going competitor activity and how it impacts on-going sales over the group of stores. The on-going data relating to the amount of goods sold at the stores is used in combination with this information about competitor activity, such as a competitor promotion being run during part or all of the period of this store sales data for a plurality of stores, to generate an updated forecast of sales for a plurality of the stores in the supply chain. The element is then provided of making this forecast available to a supplier in the supply chain.

Note that competitor activity may reduce product sales, or depending on various factors like advertising, type of product being promoted by the competitor and competitor proximity, may drive sales to the stores. Because competitor activity will not be known in advance, information relating to such on-going competitor promotions and other activity as well as appropriate historical performance of promotion products data is factored and used to generate a forecast after the promotion has started, i.e., it is important that it be current.

The element of on-going competitor activity and historical performance of promotion products in combination with data on the actual amount of on-going store sales in a plurality of stores as factors in generating an updated store product sales forecast is not disclosed or suggested by Salvo et al. Salvo et al. discloses a manufacturing site monitoring its raw material inventory usage (for example, the raw material level in a silo). See column 4, lines 32-45 and column 1, lines 8-24 of Salvo et al. Prices of the raw material are monitored in the marketplace, so that a raw material purchase may be made at a best price. See column 6, lines 13-27 of Salvo et al. Obtaining in-coming store sales data from one store, much less multiple stores, is not disclosed. Nor is collecting information relating to current competitor promotions and other activity disclosed.

Salvo takes data from and operates based on the point of view of the factory, and is principally concerned with avoiding over-orders of raw materials. To do this, Salvo

focuses on monitoring raw materials amounts in receptacles in the factory. In contrast, the present claims focus on having visibility all the way out to multiple store point-of-sale data. Consequently, the claims highlight the fact that the forecast generated is based on forward-looking sales data from a plurality of stores in the supply chain based on their store sales, rather than to monitoring a receptacle in a factory.

A review of the paragraphs of the final rejection Office Action that relates to the base reference Salvo et al. illustrates the deficiencies of this reference. The examiner states in the first part of the single sentence paragraph that Salvo discloses or inherently teaches all of the limitations of the claims, but then continues by noting that Salvo is missing a teaching on (1) the plurality of stores; (2) the receipt of data relating to on-going sales incoming from such stores---since there are no such stores in Salvo; and (3) competitor activity as a key factor is forecasting for a plurality of the stores in the supply chain [note that Salvo discloses a factory operation, so it doesn't care about competitor activity]. Moreover, note that claim is not just referencing competitor activity, but "current competitor activity."

Shavit et al. is used in an attempt to make up these deficiencies in Salvo. Shavit discloses an online information exchange between buyers and sellers, with a focus on distributors. Shavit states that for subscribing distributors

Access to distributors is provided by a menu of optional services which may range from a simple mailbox service used to collect customer orders to a complete automated wholesale distributor management system that includes such functions as order entry... See Shavit at column 6, lines 32-39.

Note that Shavit is collecting online customer orders to distributors made through the Shavit system. It is not collecting sales data from stores, or using the sales data from a plurality of stores, much less using it in combination with the key element of current customer activity, to generate an overall forecast for the group of stores that would be of interest to a supplier. Shavit makes a generic reference to forecasting at column 7, line 19, but without reference to what variables are to be used to process the forecast, or that sales data is to be used from the plurality of stores, or that competitor activity is a key variable that must be used in the processing, much less that it must be "current competitor activity." Shavit also does not teach going down to the supplier level and providing the resulting forecast to a supplier.

Without taking Official Notice of prior art within the examiner's personal knowledge, the examiner side-steps the deficiencies in both of these references by stating that "It is an obvious design choice to one of ordinary skill in the art at the time of the invention to modify Salvo et al. to have the plurality of variables include ... competitor activity ... as the variables are well known in marketing/forecasting to determine future demand for a product." However, neither reference discloses receiving data relating to sales from a plurality of stores and obtaining information on current competitor activity, then generating a forecast using such variables in combination with appropriate historical performance of promotion products data, and then providing access to the forecast to at least one supplier.

Moreover, it is incongruous at the least to try to use as a base reference an inventory management system (Salvo et al.) for a factory that monitors the levels in silos, and to modify that factory silo monitoring system with a communication system for processing business transactions online (Shavit et al.). Specifically, there is no motivation to combine these disparate references into a viable operational combination that meets applicants' claim 1. The examiner cites a statement in Shavit about dramatic new efficiencies being achievable by creating an online interactive service that creates a marketplace serving a wide spectrum of buyers. See Shavit at column 1, lines 60-68. But that paragraph does not teach or suggest to anyone how or in what way one of ordinary skill would modify Salvo to achieve applicants' combination of claim 1, or why one would do that.

Moreover, even if such a combination could be made (which it cannot), the two reference combination is still missing the key elements of using data relating to an amount of sales at a plurality of stores in combination with current competitor activity to obtain a forecast that would be of interest to a supplier, and then supplying that forecast to a supplier.

In summary, a prima facie case of unpatentability has not been made out for claim 1. Accordingly, for the reasons stated above, the claims of Group 1 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 2: Claim 4 adds the claim limitation that the information include a forecast of a promotion of a competitor. This claim is not simply obtaining information of on-going competitor activity, as per claim 1, but requires that a forecast, i.e., a prediction of a future event, be obtained and used. Not only does neither of the references Shavit nor Salvo

disclose or use “current competitor activity” as a factor, but neither reference discloses or suggests the obtaining of a prediction of a promotion of a competitor, the processing of that information, followed by the generation of a forecast of sales based on this processing. The examiner states that this claim limitation is an “obvious design choice,” but provides no basis for this assertion.

Accordingly, for the reasons stated above, the claims of Group 2 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 3: Claims 7-9, 11, 12 are similar to the method claims of Group 1. However, these claims are in system format with system limitations. Substantially the same arguments of distinction should apply for these claims.

Accordingly, for the reasons stated above, the claims of Group 3 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 4: Claim 10 is similar to claim 4, but in system format. Substantially the same arguments of distinction made for claim 4 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 4 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 5: Claim 13-15, 17, 18 are similar to the claims in Group 1, except that these claims are in program product format. Substantially the same arguments of distinction made for the claims of Group 1 should apply to claims in this group.

Accordingly, for the reasons stated above, the claims of Group 5 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 6: Claim 16 is similar to claim 4, but in program product format with computer code limitations. Substantially the same arguments of distinction made for claim 4 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 6 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 7: Claim 19 adds the element of charging a fee to the supplier based on number of products sold. Note that this is in the context of the original method claim 1, wherein sales data from is being received from a plurality of stores, information on current competitor activity is collected on an on-going basis, these variables in combination with historical performance of promotion products data are processed, a forecast is generated that

would be of interest to a supplier---because it relates to multiple stores, and access is provided to a supplier, but now only on the condition that the supplier pay a fee based on the number of products sold. No form of this element is disclosed in either of Shavit or Salvo.

The examiner states in his rejection that this limitation is an obvious design choice, but again with no basis. The examiner refers to payment of a patent royalty fee as an example of this claim limitation. However, this statement pulls the limitation out of its context as a dependent claim to claim 1. Thus, the context of claim 1 is that data from a plurality of stores relating to an amount of goods sold by the plurality of stores is received, and information on current competitor activity is collected, the data along with historical performance of promotion products data is processed, a forecast of sales is generated for a plurality of the stores based on this processing, and finally, a supplier is provided access to the forecast of sales for the plurality of stores. In that context, that supplier is charged a fee based on number of products sold. There is no basis for this limitation in either of the cited references.

Accordingly, for the reasons stated above, the claims of Group 7 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 8: Claim 20 is similar to claim 19, but in system format. Substantially the same arguments of distinction made for claim 19 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 8 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 9: Claim 21 is similar to claim 19, but in program product format. Substantially the same arguments of distinction made for claim 19 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 9 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 10: Claim 22 recites the additional elements of generating based at least in part on the data relating to the amount of goods sold by the stores a calendar of events at least in part for a planned promotion; and allowing to a plurality of members of the supply chain access to the calendar of events. These claim elements are directed to generating (which encompasses updating) a calendar of events for a promotion after receiving product sales data from a plurality of outlets of a supply chain. The purpose of this generating a calendar of events after receiving product sales data, is to allow mid-promotion changes of



events based on the sales data from a plurality of stores. For example, based on the volume of product sales data across the plurality of stores, a calendar for the promotion may be generated to extend the promotion (sell-off time to get rid of inventory), or to cut short the promotion, or to extend or cut short when the signage (point of presence) for the promotion can/must be taken down from displays, or to extend the length of time for TV or radio or Web advertising, or to grant a shelf life extension, or to set a parameter for salvage. A number of these changes relate to minimizing inventory risk. The provision of access to such a calendar of events can serve as an alert to changes in the promotion based on the product sales data.

Referring to the cited references, they do not disclose or suggest the concept of generating a calendar of events after receiving product sales data from supply chain outlets, much less doing this for a promotion.

The examiner states in his rejection that this limitation is an obvious design choice, but again with no basis. The examiner states that “a calendar of events for access by supply chain members is well known management in order to keep organized and thus maintain efficiency.” However, this statement pulls the limitation out of its context as a dependent claim to claim 1. Thus, the context of claim 1 is that data from a plurality of stores relating to an amount of goods sold by the stores is received, and information on current competitor activity is collected, the data in combination with historical performance of promotion products data is processed based on this information, a forecast of sales is generated for a plurality of the stores based on this processing, and finally, a supplier is provided access to the forecast of sales for the plurality of stores. In that context, with on-going sales data from a plurality of stores in combination with information on historical data and current competitor activity, the amount of goods sold by the stores is used to generate a calendar of events. There is no basis for this limitation in either of the cited references.

Accordingly, for the reasons stated above, the claims of Group 10 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 11: Claim 23 is similar to claim 22, but in system format. Substantially the same arguments of distinction made for claim 22 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 11 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 12: Claim 24 is similar to claim 22, but in program product format. Substantially the same arguments of distinction made for claim 22 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 12 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 13: Independent claim 25 is similar to the independent claim 1, except that claim 25 includes the step of “collecting information relating to a plurality of variables including at least historical performance of promotion products and cannibalization of at least one product that is not a part of a promotion but is offered for sale at a same time as the promotion.” Note that the aspect of cannibalization is discussed in applicants’ specification at pages 39-41. Claims 26 and 27 include a comparable element in system and computer program format. Neither of the references cited disclose using as one of the plurality of variables cannibalization information for products not in the promotion.

The examiner again states that “cannibalization is well known to occur when one promoted product is sold along with a non-promoted product (See for example, Webster’s Dictionary, tenth edition, ‘cannibalize’).” There is nothing that puts cannibalization in the context of the claim combination with sales data from a plurality of stores and historical data, namely, data from a plurality of stores relating to an amount of goods sold by the stores is received, and information on cannibalization is collected, the data is processed based on this information, a forecast of sales is generated for a plurality of the stores based on this processing, and finally, a supplier is provided access to the forecast of sales for the plurality of stores.

Accordingly, for the reasons stated above, the claims of Group 13 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 14: Claim 26 is similar to claim 4, but in system format. Substantially the same arguments of distinction made for claim 25 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 14 are patentable over the reference combination of Salvo et al. over Shavit et al.

Group 15: Claim 27 is similar to claim 25, but in program product format. Substantially the same arguments of distinction made for claim 25 should apply to this claim.

Accordingly, for the reasons stated above, the claims of Group 15 are patentable over the reference combination of Salvo et al. over Shavit et al.

**CONCLUSION**

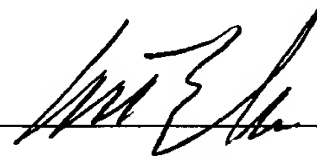
For the foregoing reasons, it is submitted that the examiner's rejection are erroneous, and reversal of the applied rejections is respectfully requested.

Respectfully submitted,

Date September 23, 2004

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**APPENDIX**

**Currently Pending Claims:**

1. A method for collecting data to forecast sales in a supply chain, comprising:
  - a) receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
  - b) collecting information relating to a plurality of variables including at least historical performance of promotion products and current competitor activity;
  - c) processing in a computer the data based on the information relating to the variables;
  - d) generating a forecast of sales for a plurality of the stores in the supply chain based on the processing; and
  - e) providing access to a supplier to the forecast of sales.
2. The method of claim 1, wherein the variables include each of weather, competitor activity, and a marketing calendar.
3. The method of claim 2, wherein the information relating to the weather includes weather forecast.
4. The method of claim 1, wherein the information relating to the competitor activity includes a forecast of a promotion of a competitor.
5. The method of claim 1, wherein the variables include a forecast of a promotion of the stores.
6. The method of claim 1, wherein the network includes the Internet.
7. A system for collecting data to forecast sales in a supply chain, comprising:

an electronic storage; and

a set of processors that use the electronic storage and include among them the following logic elements

- a) logic for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) logic for collecting information relating to a plurality of variables including at least historical performance of promotion products and current competitor activity;
- c) logic for processing the data based on the information relating to the variables;
- d) logic for generating a forecast of sales for a plurality of the stores in the supply chain based on the processing; and
- e) logic for providing access to a supplier to the forecast of sales.

8. The system of claim 7, wherein the variables include each of weather, competitor activity, and a marketing calendar.

9. The system of claim 8, wherein the information relating to the weather includes weather forecast.

10. The system of claim 7, wherein the information relating to the competitor activity includes a forecast of a promotion of a competitor.

11. The system of claim 7, wherein the variables include a forecast of a promotion of the stores.

12. The system of claim 7, wherein the network includes the Internet.

13. A computer program product for collecting data to forecast sales in a supply chain, comprising:

a set of computer usable media having computer readable program code embodied among them to be executed by a computer, the computer readable program code comprising:

- a) computer code for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) computer code for collecting information relating to a plurality of variables including at least historical performance of promotion products and current competitor activity;
- c) computer code for processing the data based on the information relating to the variables; and
- d) computer code for generating a forecast of sales for a plurality of the stores in the supply chain based on the processing; and
- e) computer code for providing access to a supplier to the forecast of sales..

14. The computer program product of claim 13, wherein the variables include each of weather, competitor activity, and a marketing calendar.

15. The computer program product of claim 14, wherein the information relating to the weather includes weather forecast.

16. The computer program product of claim 13, wherein the information relating to the competitor activity includes a forecast of a promotion of a competitor.

17. The computer program product of claim 13, wherein the variables include a forecast of a promotion of the stores.

18. The computer program product of claim 13, wherein the network includes the Internet.

19. The method of claim 1, further comprising charging a fee to the supplier based on number of products sold.

20. The system of claim 7, further comprising a component for charging a fee to the supplier based on number of products sold.

21. The computer program of claim 13, further comprising program code for charging a fee to the supplier based on number of products sold

22. The method of claim 1, further comprising  
generating based at least in part on the data relating to the amount of goods sold by the stores a calendar of events at least in part for a planned promotion; and  
allowing to a plurality of members of the supply chain access to the calendar of events.

23. The system of claim 7, further comprising  
a component for generating based at least in part on the data relating to the amount of goods sold by the stores a calendar of events at least in part for a planned promotion; and  
a component for allowing to a plurality of members of the supply chain access to the calendar of events.

24. The computer program of claim 13, further comprising  
computer code for generating based at least in part on the data relating to the amount of goods sold by the stores a calendar of events at least in part for a planned promotion; and  
computer code for allowing to a plurality of members of the supply chain access to the calendar of events.

25. A method for collecting data to forecast sales in a supply chain, comprising:

- a) receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) collecting information relating to a plurality of variables including at least historical performance of promotion products and cannibalization of at least one product that is not a part of a promotion but is offered for sale at a same time as the promotion;
- c) processing in a computer the data based on the information relating to the variables;
- d) generating a forecast of sales for a plurality of the stores in the supply chain based on the processing; and
- e) providing access to a supplier to the forecast of sales.

26. A system for collecting data to forecast sales in a supply chain, comprising:

an electronic storage; and

a set of processors that use the electronic storage and include among them the following logic elements

- a) a component for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;
- b) a component for collecting information relating to a plurality of variables including at least historical performance of promotion products and cannibalization of at least one product that is not a part of a promotion but is offered for sale at a same time as the promotion;
- c) a component for processing the data based on the information relating to the variables;
- d) a component for generating a forecast of sales for a plurality of the stores in the supply chain based on the processing; and
- e) a component for providing access to a supplier to the forecast of sales.



27. A computer program for collecting data to forecast sales in a supply chain, comprising:

a set of computer usable media having computer readable program code embodied among them to be executed by a computer, the computer readable program code comprising

a) computer code for receiving data from a plurality of stores of a supply chain utilizing a network, the data relating to an amount of goods sold by the stores;

b) computer code for collecting information relating to a plurality of variables including at least historical performance of promotion products and cannibalization of at least one product that is not a part of a promotion but is offered for sale at a same time as the promotion;

c) computer code for processing the data based on the information relating to the variables;

d) computer code for generating a forecast of sales for a plurality of the stores in the supply chain based on the processing; and

e) computer code for providing access to a supplier to the forecast of sales.